

# Permitting Decisions- Environment Agency Initiated Variation

We have issued an Environment Agency initiated variation for Willesdon Depot operated by European Metal Recycling Limited following a review of the permit in accordance with Environmental Permitting (England and Wales) Regulations 2016, regulation 34(1).

The variation number is EPR/FB3205MK/V004.

#### **Permit Review**

This Environment Agency has a duty, under the Environmental Permitting (England and Wales) Regulations 2016 (EPR), regulation 34(1), to periodically review permits. Article 21(3) of the Industrial Emissions Directive (IED) also requires the Environment Agency to review conditions in permits to ensure that they deliver compliance with relevant standards, within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions.

We have reviewed the permit for this regulated facility and varied the permit to make a number of changes to reflect relevant standards and best practice. These changes principally relate to the implementation of our technical guidance for <u>WEEE treatment and transfer</u> and <u>Treating metal waste in shredders</u>, including the relevant requirements of the <u>BAT Conclusions for Waste Treatment</u> which have been incorporated into our guidance.

In this decision document, we set out the reasoning for the variation notice that we have issued.

It explains how we have reviewed and considered the techniques used by the operator in the operation and control of the plant and activities of the installation (operating techniques) against our technical guidance.

As well as considering the review of the operating techniques used by the Operator for the operation of the plant and activities of the installation, the consolidated variation notice takes into account and brings together in a single document all previous variations that relate to the original permit issue. Where this has not already been done, it also modernises the entire permit to reflect the conditions contained in our current generic permit template.

## Purpose of this document

This decision document provides a record of the decision making process. It:

- explains how the Environment Agency initiated variation has been determined;
- summarises the decision making process in the <u>decision considerations</u> section to show how the main relevant factors have been taken into account;
- highlights key issues in the determination.

Read the permitting decisions in conjunction with the environmental permit and the variation notice.

## Key issues of the decision

#### Environment Agency led variation – permit review

We have carried out an Environment Agency initiated variation to the permit following a permit review as required by legislation to ensure that permit conditions deliver compliance with relevant legislative requirements and appropriate standards to protect the environment and human health.

The Industrial Emissions Directive (IED) came into force on 7 January 2014 with the requirement to implement all relevant Best Available Techniques (BAT) Conclusions as described in the Commission Implementing Decision. Article 21(3) of the IED requires the Environment Agency to review conditions in permits that it has issued and to ensure that the permit delivers compliance with relevant standards, within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions.

The BAT Conclusions for Waste Treatment (the BREF) was published on 17 August 2018 following a European Union wide review of BAT, implementing decision (EU) 2018/1147 of 10 August 2018. Relevant existing facilities were expected to be in compliance with the BAT Conclusions within 4 years (i.e. by August 2022).

On 13th July 2022 our WEEE (waste electrical and electronic equipment) appropriate measures guidance was published on gov.uk. This guidance includes additional appropriate measures for WTEE (waste temperature exchange equipment).

This technical guidance explains the standards (appropriate measures) that are relevant to regulated facilities with an environmental permit to treat or transfer

WEEE (including WTEE) and incorporates the relevant requirements of the BAT Conclusions.

On 20<sup>th</sup> October 2021 our Treating metal waste in shredders appropriate measures guidance was published on gov.uk. This technical guidance explains the standards that are relevant to regulated facilities with an environmental permit to mechanically treat metal waste in shredders and incorporates the relevant requirements of the BAT Conclusions.

The following Appropriate Measures guidance is also applicable to the permitted activities being varied under this permit review and has been included in the operating techniques table.

Chemical waste: appropriate measures for permitted facilities – published 18 November 2020.

We issued a notice under regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 20/04/2022 requiring the operator to provide information to confirm that the operation of their facility currently meets, or how it will subsequently meet, the standards (appropriate measures) described in our technical guidance.

The notice required that where the revised standards are not currently met, the operator should provide information that:

- Describes the techniques that will be implemented to ensure operations meet the relevant standards and by when, or
- Explains why they are not applicable to the facility in question, or
- Justifies why an alternative technique is appropriate and will achieve an equivalent level of environmental protection to the standards described in our guidance

The standards described in our technical guidance are split into 7 chapters:

- General management appropriate measures
- Waste pre-acceptance, acceptance and tracking appropriate measures
- Waste storage, segregation and handling appropriate measures
- Waste treatment appropriate measures
- Emissions control appropriate measures
- Emissions monitoring and limits appropriate measures
- Process efficiency appropriate measures

The WTEE appropriate measures guidance, which supplements the WEEE technical guidance, includes an additional chapter on Process monitoring. We have set emission limit values (ELVs) and monitoring requirements for relevant substances in line with our technical guidance and the BAT Conclusions

for Waste Treatment, unless a tighter, i.e. more stringent, limit was previously imposed and these limits have been carried forward.

The Regulation 61 notice required the operator to confirm whether they could comply the standards described in each of these chapters. Table 1 below provides a summary of the response received and our assessment of it. The overall status of compliance with the standards (appropriate measures) is indicated in the table as:

- NA Not Applicable
- CC Currently Compliant
- FC Compliant in the future (through improvement conditions set in permit)
- NC Not Compliant

In accordance with Article 22(2) of the Industrial Emissions Directive, the Regulation 61 notice asked the operator to provide a soil and groundwater risk assessment, along with a baseline report or summary report confirming the current state of soil and groundwater contamination, where listed activities are undertaken that involve the use, production of release of relevant hazardous substances.

The Regulation 61 notice also asked the operator to confirm whether they operate a medium combustion plant or specified generator (as per Schedule 25A or 25B of EPR 2016) and whether they had considered how their operations could be affected by climate changes (e.g. through a climate change adaptation plan).

Our assessment of the responses received from the operator regarding soil and groundwater risk assessment, medium combustion plant and specified generators, and consideration of climate change are also summarised in Table 1.

The Regulation 61 notice response from the Operator was received on 21/07/2022 (Treating metal waste in shredders Appropriate Measures) and 29/08/2022 (WEEE Appropriate Measures).

We considered that the response did not contain sufficient information for us to commence determination of the permit review. We therefore issued a further information request to the operator. Suitable further information was provided by the operator on 08/12/2023, 25/01/2024, 22/02/2024 and 26/03/2024.

Although we were able to consider the Regulation 61 notice response generally satisfactory at receipt, we needed more information in order to complete our permit review assessment. We requested this by email and the operator provided further information on:

- Consideration of hazardous waste outputs from shredded fridge plastic and non-ferrous metals from the fridge recycling plant;
- Consideration of waste classification relating to the shredded fridge plastic;
- Justification of procedures in relation to the storage of batteries;
- Clarification of distinguishing fridge types;
- Confirmation of implementation of management procedures relating to the WEEE, Chemical and Metal Shredding Appropriate Measures;
- Details for the replacement of the Stage 1 de-gassing equipment;
- Justification for the extended storage duration of non-permitted waste types;
- Further details of the waste exemptions on site;
- Clarification for the maximum storage of waste under permitted activities.
- Provision of the updated site drainage plan
- Provision of an updated accident management plan
- Confirmation of the location of coverage for hazardous waste
- Confirmation of the wastewater/surface water strategy
- Confirmation of compliance with the production of flow diagrams and water mass balance.

We have made a copy of this information available on our public register.

 Table 1 – Summary of our assessment of the operator's Reg 61 response

Appropriate measures	Compliance status	Assessment of the installation's compliance with relevant standards (appropriate measures) and any alternative techniques proposed by the operator
General management appropriate measures	FC	<ul> <li>WEEE (Including WTEE): Appropriate Measures</li> <li>The operator confirmed that they currently meet the requirements of the appropriate measures in this section with the exception of:         <ul> <li>Section 2.1, Point 2 (WTEE) which requires the operator to complete a comprehensive monitoring exercise to demonstrate that the stage 1 processing of WTEE does not lead to fugitive releases to air. The operator has recently replaced their Stage 1 process so an Improvement Condition has been implemented to complete an updated assessment.</li> </ul> </li> <li>Treating Metal Waste In Shredders: Appropriate Measures</li> <li>The operator confirmed that they currently meet the requirements of all appropriate measures in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.</li> </ul>
Waste pre-acceptance, acceptance and tracking appropriate measures	CC	WEEE (Including WTEE): Appropriate Measures         The operator confirmed that they currently meet the requirements of all appropriate measures in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2. <u>Treating Metal Waste In Shredders: Appropriate Measures</u> The operator confirmed that they currently meet the requirements of all appropriate measures in this section. Compliance with the appropriate measures in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.

Waste storage, segregation	FC	WEEE (Including WTEE): Appropriate Measures
and handling appropriate		
measures		The operator confirmed that they currently meet the requirements of the appropriate measures in this section with the exception of:
		• Section 4.2, Point 1-18 (WEEE) which relates the additional storage requirements of gas discharge lamps, flat panel display equipment, cathode ray tube equipment, small mixed WEEE, and photovoltaic panels. The operator has confirmed that this is N/A as the installation does not accept, store or treat any of these wastes.
		Treating Metal Waste In Shredders: Appropriate Measures
		The operator confirmed that they currently meet the requirements of the appropriate measures in this section with the exception of:
		• Section 4.4, Point 4 which states that lead acid batteries must be stored upright with terminals taped off or capped in acid proof containers to prevent leaks and short circuits. The operator has confirmed they currently do not tape/cap the terminals due to a concern with increase fire risk. We have included an Improvement Condition which asks the operator to provide an alternative measure or comply with the appropriate measure. This has been included in the Improvement Condition programme.
Waste treatment appropriate	FC	WEEE (Including WTEE): Appropriate Measures
measures		The operator confirmed that they currently meet the requirements of the appropriate measures in this section with the exception of:
		<ul> <li>Section 5.5, Point 1-14 (WEEE) which sets out the treatment of gas discharge lamps. The operator has confirmed that this is N/A as they do not receive, store, or treat this waste type.</li> <li>Section 5.6, Point 1-14 (WEEE) which sets out the treatment of cathode ray tube equipment. The operator has confirmed that this is N/A as they do not receive, store, or treat this waste type.</li> <li>Section 5.7, Point 1-14 (WEEE) which sets out the treatment of flat panel display equipment. The operator has confirmed that this is N/A as they do not receive, store, or treat this waste type.</li> <li>Section 5.7, Point 1-14 (WEEE) which sets out the treatment of flat panel display equipment. The operator has confirmed that this is N/A as they do not receive, store, or treat this waste type.</li> </ul>

<ul> <li>Section 5.8, Point 1-14 (WEEE) which sets out the treatment of small mixed WEEE. The operator has confirmed that this is N/A as they do not receive, store, or treat this waste type.</li> <li>Section 5.9, Point 1-14 (WEEE) which sets out the treatment of IT, telecommunications and business equipment. The operator has confirmed that this is N/A as they do not receive, store, or treat this waste type.</li> <li>Section 5.11, Point 1-14 (WEEE) which sets out the treatment of photovoltaic panels. The operator has confirmed that this is N/A as they do not receive, store, or treat this waste type.</li> <li>Section 5.12, Point 5 (WEEE) which requires fully characterisation and classification of process solutions and washings from density separation processes before determining suitable disposal options. The operator has confirmed this is N/A as no density separation processes occur on site.</li> <li>Section 5.2, Point 5 (WEEE) which requires up-to-date written details of treatment activities, and the abatement and control equipment used. The operator has not completed several sections and therefore this has been implemented into an Improvement Condition.</li> </ul>
Treating Metal Waste In Shredders: Appropriate Measures
The operator confirmed that they currently meet the requirements of the appropriate measures in this section with the exception of:
• Section 5.1, Point 4 requires up-to-date written details of treatment activities, and the abatement and control equipment used. The operator has not completed several sections and therefore this has been implemented into an Improvement Condition.
<ul> <li>Section 5.2, Point 6 which requires full characterising and classifying of process solutions and washings from density separation processes. This is N/A as density separation is carried out via a cyclonic process using air.</li> </ul>
• Section 5.4, Point 1, Section 5.5, Point 3, and Section 6.1, Point 1 which relate to minimising the release of diffuse emissions to air from activities that may create them. This is achieved by carrying out the activity using enclosed equipment or closed buildings. The operator has stated that they cannot adhere to this due to the risk of flame events within the shredder. The operator
has provided alternative measures that reduce dust emissions through a misting system, and the covering and enclosing of conveyors, transfer points and drop points downstream of the shredder, approved under IC3 of the permit. However, we have also included an improvement condition for the assessment and approval of a Dust Emissions Management Plan. This has

		been included in the Improvement Condition programme.
Emissions control appropriate measures	FC	<u>WEEE (Including WTEE): Appropriate Measures</u> The operator confirmed that they currently meet the requirements of the appropriate measures in this
		<ul> <li>section with the exception of:</li> <li>Section 6.1, Point 1-3 (WEEE) and section 6.4, Point 2 which requires an assessment of the fate and impact of the substances emitted to air and water, following the Environment Agency's air and water emission risk assessment methodology. An Improvement Condition has been included for this assessment. This has been included in the Improvement Condition programme.</li> <li>Section 6.2, Point 7 (WEEE) which requires a leak detection and repair programme to identify and mitigate any fugitive emissions from treatment plan and associated infrastructure. The operator has not formally completed this and therefore an Improvement Condition has been</li> </ul>
		<ul> <li>included for completion.</li> <li>Section 6.5, Point 5 (WEEE) requires the collection and treatment of each separate water stream generated at the facility, with requirements to segregate uncontaminated water streams from those that require treatment. The operator has stated that this is N/A as all water on site may be contaminated and is collected in a sealed drainage system, filtered through and interceptor. We have assessed this against BAT 19f from the Waste Treatment Bref which details segregation of water streams are "Generally applicable to existing plants within the constraints associated with the layout of the water drainage system". As the existing water drainage system would be constrained to separate due to pre-existing drainage structures, we agree that this would not currently be feasible.</li> </ul>
		Treating Metal Waste In Shredders: Appropriate Measures The operator confirmed that they currently meet the requirements of the appropriate measures in this
		<ul> <li>Section with the exception of:</li> <li>Section 6.2, Point 9 which recommends the operator to keep enclosed buildings and equipment under adequate negative pressure. The site uses storage sheds that have large open air access points, which makes negative pressure impossible. Instead, the piles are dampened down to mitigate against diffuse emissions. An Improvement Condition has been implemented</li> </ul>

		<ul> <li>to provide a Dust &amp; Emissions Management Plan. See Improvement Programme section for further details.</li> <li>Section 6.2, Point 17 which requires a leak detection and repair programme to identify and mitigate any fugitive emissions from treatment plan and associated infrastructure. The operator has not formally completed this and therefore an Improvement Condition has been included for completion.</li> <li>Section 6.5, Point 4 requires the operator to collect and treat separately each water stream generated at the facility. The operator has stated that this is N/A as all water on site may be contaminated and is collected in a sealed drainage system, filtered through and interceptor. We have assessed this against BAT 19f from the Waste Treatment Bref which details segregation of water streams are "Generally applicable to existing plants within the constraints associated with the layout of the water drainage system". As the existing water drainage system would be constrained to separate due to pre-existing drainage structures, we agree that this would not currently be feasible.</li> <li>1. <u>Best Available Techniques (BAT) Reference Document for Waste Treatment Industrial Emissions</u> Directive 2010/75/EU Integrated Pollution Prevention and Control (europa.eu)</li> </ul>
Emissions monitoring and limits appropriate measures	FC	WEEE (Including WTEE): Appropriate Measures         The operator confirmed that they currently meet the requirements of all appropriate measures in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.         Treating Metal Waste In Shredders: Appropriate Measures         The operator confirmed that they currently meet the requirements of all appropriate measures in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Process efficiency appropriate	00	WEEE (Including WTEE): Appropriate Measures
measures	00	
		The operator confirmed that they currently meet the requirements of all appropriate measures in this
		section. Compliance with the appropriate measures in this section of the guidance has been

	incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Process monitoring appropriate measures	CC The operator confirmed that they currently meet the requirements of all appropriate measures in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Reg 61 requirement	Assessment of response received
Soil and groundwater risk assessment	The operator has not provided a soil and groundwater risk assessment. A site condition report was submitted that references 'Site condition report (SCR)' in response to a Request For Information, submitted on 08/12/2023.
Medium combustion plant and specified generators	N/A. The operator confirmed that there are no combustion plant or generators associated with the permitted activity.
Climate change	The operator has not provided a climate change adaptation plan, instead relying on the potential impact of climate change through a climate change risk assessment which forms part of the wider Environmental Management Plan.
Summary of other changes mad	e to the permit as a result of our assessment of the Reg 61 response
End of Life Vehicles (ELVs): Appropriate Measures for permitting facilities	The operator currently operates a vehicles storage, depollution and dismantling authorised waste treatment facility. At the time of the Regulation 61 response, the ELV Appropriate Measures were not yet published, and the operator provided a response to the Chemical Waste: Appropriate Measures and Treating Metal Waste in Shredders: Appropriate Measures.
	Due to the later timing of publishing the End of Life Vehicles (ELVS): Appropriate Measures for permitting facilities, we have decided not to include an assessment of the relevant appropriate measures within the scope of this permit review.

## **Decision Considerations**

#### **Confidential information**

A claim for commercial or industrial confidentiality has not been made.

The decision was taken in accordance with our guidance on confidentiality.

## Identifying confidential information

We have not identified information provided as part of the Regulation 61 notice response that we consider to be confidential.

The decision was taken in accordance with our guidance on confidentiality.

#### The regulated facility

We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN2 'Defining the scope of the installation', and Appendix 1 of RGN 2 'Interpretation of Schedule 1'.

#### The site

There is no change to the site plan as a result of this variation. The plan is included in the permit.

## **Operating techniques**

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.

The operating techniques that the applicant must use are specified in S1.2 in the environmental permit.

#### Changes to the permit conditions

We have varied the permit as stated in the variation notice.

#### Fire Prevention plan

The Fire Prevention Plan has not been amended as a result of this variation. However, the approved Fire Prevention Plan submitted in 2018 has been incorporated into the operating techniques table (table S1.2). The operator has provided an updated Fire Prevention Plan which has not been assessed. However, this will be assessed in accordance with future compliance assessments.

#### Dust management

A Dust & emissions management plan has been requested as part of the improvement condition requirements.

#### Improvement programme

We have included an improvement programme to ensure that the permit is in accordance with the relevant appropriate measures and guidance.

- IC 10 The submission of a written report for an updated emissions inventory and H1 assessment for air and water;
- IC 11 The submission of a written Dust Emission Management Plan;
- IC 12 The review and submission of waste storage, segregation and handling procedures in relation to accepted batteries on site;
- IC 13 The submission of monitoring exercises to demonstrate that the replacement Stage 1 process does not give rise to fugitive releases to air;
- IC 14 The submission of an updated Fire Prevention Plan;
- IC 15 The review and submission of an equipment inventory, control system, venting and emergency relief provisions and process instrumentation diagrams; and
- IC 16 The review and submission of the emissions control procedures, include a leak detection and repair programme;
- IC 17 A review of the viability of monitoring of emission points from V230 and V243, including an assessment of the emission parameters during the treatment process to understand whether they are sufficient to undertake as required by Table S3.1. If not, then proposals that meet an equivalent level of environmental protection through the process monitoring. And finally, proposals for the monitoring of fugitive releases from the vents/valves as part of the leak detection and repair monitoring programme.

The following Improvement Conditions have been completed and have been removed from the permit:

IC 1	The operator shall submit a written procedure to the Environment	Complete
	Agency for approval for the use of Best Available Techniques to	•
	trace and inspect baled wastes delivered to the site. This shall	

	include, but not be limited to, detailed monitoring and management of:	
	(a) bale suppliers and processing;	
	(b) flame events and audible events associated with processing of baled waste; and	
	(c) concealed items, non-metallic materials, undepolluted End of Life Vehicles, cylinders/sealed containers or heavy non- shreddable items	
	The procedure shall include risk-based inspection of individual bales which includes pre-treating, opening or breaking of bales as appropriate.	
	The operator shall implement the procedure in accordance with the Environment Agency's written approval.	
IC 2	The operator shall submit a written management system to the Environment Agency.	Complete
	The management system must ensure that all Installation Activities (reference A1-A8 in Table S1.1) are undertaken in accordance with Best Available Techniques	
	The Management system shall include:	
	(a) a clearly documented and auditable waste acceptance procedure which details:	
	(i) assessment of potential in-feed including pre- acceptance checks to ensure that the wastes received are suitable for shredding,	
	(ii) procedures for the identification, confiscation and repatriation of gas cylinders and other prohibited items,	
	(iii) a dedicated waste reception area with suitably trained staff controlling inspection, reception and validation of wastes	
	(iv) a dedicated quarantine area for wastes that are prohibited, awaiting full inspection, testing or removal	
	(b) clearly documented and auditable material handling procedures that ensure emissions including dust and noise from material handling are prevented or where that is not practicable minimised, and	
	(c) clearly documented and auditable procedures for the management of shredder residues which ensure that:	

	<ul> <li>i) all residues are stored on impermeable surface with sealed drainage in a way that prevents or where that is not practicable, minimises emissions and prevents wind-blown dispersion</li> <li>ii) all residues are characterised and assessed for appropriate further processing, recovery or disposal</li> <li>The operator shall implement the management system in appropriate further processing.</li> </ul>	
	accordance with the Environment Agency's whiten approval.	
IC 3	The operator shall submit proposals to the Agency that demonstrate they are preventing, or where that is not practicable, minimising emissions of dust and particulates by the movement and handling of materials by conveyor belt. This should include as appropriate:	Complete
	(a) covering of conveyors, transfer points and drop points downstream of the shredder; and	
	spraying and misting shall be used in dry or windy conditions	
IC 4	The operator shall submit a written monitoring plan to the Environment Agency for approval that includes:	Complete
	(a) proposals to undertake representative monitoring of the surface water discharged from the "Foul Sewer Emission Point" including the parameters to be monitored, frequencies of monitoring and methods to be used;	
	The operator shall carry out the monitoring in accordance with the Environment Agency's written approval	
IC 5	The operator shall submit a written report to the Environment Agency for approval that includes:	Complete
	<ul> <li>(a) the results of an assessment of the impact of the emissions of surface water from the site using the Environment Agency's 'H1 Environmental Risk Assessment' tool (or equivalent as agreed with the Environment Agency) based on the parameters monitored in IC4 above; and</li> </ul>	
	(b) proposals for appropriate measures to mitigate the impact of any emissions where the assessment determines they have the potential to be significant, including dates for implementation of individual measures.	
	The operator shall implement the measures in (b) as approved, and from the dates stipulated by the Environment Agency.	

IC 6	The operator shall submit a written plan to the Environment Agency for approval that includes:	Complete
	(b) proposals to undertake representative monitoring of the air discharged from points [A1, A2] including the parameters to be monitored, frequencies of monitoring and methods to be used;	
	(c) proposals to undertake representative monitoring of the ambient air including the sampling locations, parameters to be monitored, frequencies of monitoring and methods to be used;	
	(d) confirmation that a written report will be submitted to the Environment Agency for approval that includes:	
	<ul> <li>i) the results of an assessment of the impact of the emission to air from the site using the Environment Agency's 'H1 Environmental Risk Assessment' tool (or equivalent as agreed with the Environment Agency) based on the parameters monitored in (a) above; and</li> </ul>	
	ii) proposals for appropriate measures to mitigate the impact of the emission where the assessment determines they are significant, including emissions limits and monitoring and dates for implementation of individual measures; and	
	iii) details of appropriate measures for the operation and maintenance of the abatement system to ensure that where emission limits are proposed they are met or, where emission limits are not required, emissions remain insignificant.	
	The operator shall carry out the monitoring in accordance with the Environment Agency's written approval.	
IC 7	The operator shall submit a written monitoring plan to the Environment Agency for approval.	Complete
	The plan must contain proposals for a comprehensive monitoring exercise to demonstrate that the stage 1 and stage 2 processing of refrigeration units and insulation panels does not give rise to fugitive releases to air of refrigerant or blowing agent gases (i.e. CFCs, HCFCs, HFCs or HCs).	
	The operator shall carry out the monitoring exercise and submit a report in accordance with the Environment Agency's written approval.	

	The operator will give the Environment Agency at least fourteen days' notice of the commencement of the monitoring exercise. The Environment Agency will be notified immediately if any fugitive releases are detected during the monitoring exercise.	
IC 8	The Operator shall submit a written proposal to the Environment Agency to carry out tests to determine the size distribution of the particulate matter in the exhaust gas emissions to air from emission point A1, identifying the fractions within the PM10, and PM2.5 ranges. The proposal shall include a timetable for approval by the Environment Agency to carry out such tests and produce a report on the results. On receipt of written agreement by the Environment Agency	Complete
	to the proposal and the timetable, the Operator shall carry out the tests and submit to the Environment Agency a report on the results.	
IC 9	The operator shall develop and submit a fire prevention plan to the Environment Agency in writing. The plan shall take into account the required information as specified in the Environment Agency's technical guidance, Fire prevention plans (as revised). The appropriate measures for fire	Complete
	prevention shall include:	
	<ul> <li>the management of storage of feedstock, product and/or waste piles</li> </ul>	
	<ul> <li>the management of storage of feedstock, product and/or waste piles</li> <li>measures to prevent, detect and contain fires; and</li> </ul>	
	<ul> <li>the management of storage of feedstock, product and/or waste piles</li> <li>measures to prevent, detect and contain fires; and</li> <li>the management of fire-waters.</li> </ul>	
	<ul> <li>the management of storage of feedstock, product and/or waste piles</li> <li>measures to prevent, detect and contain fires; and</li> <li>the management of fire-waters.</li> <li>The notification requirements of condition 2.9.2 will be deemed to have been complied with on submission of the written proposals.</li> </ul>	

#### **Emission limits**

Emission Limit Values (ELV's) based on Best Available Techniques – Achievable Emission Levels (BAT-AELS) for Waste Treatment have been added or amended for the following substances:

The following parameters and associated emission limits have been added to the point source referenced 'A1' within the permit:

- Total VOCs no limit set
- Brominated flame retardants no limit set
- Dioxin-like polychlorinated biphenyls (PCBs) no limit set
- Metals (As, Cd, Co, Cr, Cu, Mn, Ni, Pb, Sb, Se, Tl, V) no limit set
- Dioxins and furans (PCDD/F) no limit set

The following parameters and associated emission limits have been added to the point source referenced 'A2' within the permit (A2 consists of two emission points listed in the permit as V230 and V243):

- CFCs 10 mg/m<sup>3</sup>
- Air flow no limit set
- Brominated flame retardants no limit set
- Dioxin-like polychlorinated biphenyls (PCBs) no limit set
- Metals (As, Cd, Co, Cr, Cu, Mn, Ni, Pb, Sb, Se, Tl, V) no limit set
- Dioxins and furans (PCDD/F) no limit set

The following parameters and associated emission limits have been amended to the point source referenced 'A1' within the permit:

• Dust – 5 mg/m<sup>3</sup>

The following parameters and associated emission limits have been amended to the point source referenced 'A2' within the permit (A2 consists of two emission points listed in the permit as V230 and V243):

- Dust 5 mg/m<sup>3</sup>
- Total VOCs (concentration) 15 mg/m<sup>3</sup>
- Total VOCs (mass emission) Mass loss limit, set on a pro-rate basis, based upon a mass limit of 5g per 100 units treated per hour

Emissions limits have been added for indirect emissions to sewer as a result of this variation based on Best Available Techniques – Achievable Emission Levels (BAT-AELS) for Waste Treatment for the following substances:

- Hydrocarbon oil index 10 mg/l
- Arsenic 0.05 mg/l
- Cadmium 0.05 mg/l
- Chromium 0.15 mg/l
- Copper 0.5 mg/l
- Lead 0.3 mg/l
- Nickel 0.5 mg/l

- Zinc 2.0 mg/l
- Mercury 0.005 mg/l
- PFOA, PFAS, Deca BDE no limit set

These limits were derived from:

- The BAT Conclusions for waste treatment, August 2018 under Directive 2010/75/EU
- Environment Agency guidance 'Treating metal waste in shredders: appropriate measures'
- Environment Agency guidance 'Waste electrical and electronic equipment (WEEE): appropriate measures'
- Environment Agency guidance 'Waste temperature exchange equipment: appropriate measures'

#### Monitoring

We have decided that monitoring should be added out for the following parameters, using the methods detailed and to the frequencies specified:

Process monitoring (table S3.4):

- Stage 1 degassing: Refrigerant recovery, based upon mass balance calculation
- Stage 2 destruction: Blowing agent recovered as a percentage of the theoretical content of the waste treated
- All mechanical treatment of WEEE: Mass balance

These monitoring requirements have been included in order to ensure that the abatement is operating correctly and ensure that the monitoring is in line with our guidance.

We made these decisions in accordance with:

- Environment Agency guidance 'Waste electrical and electronic equipment (WEEE): appropriate measures'
- Environment Agency guidance 'Waste temperature exchange equipment: appropriate measures'

We made these decisions in accordance with Best Available Techniques for Waste Treatment.

### Reporting

We have added reporting in the permit for the following parameters:

Emissions to air:

- Dust
- Brominated flame retardants
- Dioxin-like polychlorinated biphenyls (PCBs)
- Metals (As, Cd, Co, Cr, Cu, Mn, Ni, Pb, Sb, Se, Tl, V)
- Dioxins and furans (PCDD/F)
- CFCs
- Total VOCs
- Total VOCs (concentration)
- Total VOCs (mass emission)
- Air flow

Emissions to water:

- Hydrocarbon oil index
- Arsenic
- Cadmium
- Chromium
- Copper
- Lead
- Nickel
- Zinc
- Mercury
- PFOA, PFAS, Deca BDE

Process monitoring:

- Stage 1 degassing: Refrigerant recovery, based upon mass balance calculation
- Stage 2 destruction: Blowing agent recovered as a percentage of the theoretical content of the waste treated
- All mechanical treatment of WEEE: Mass balance

We made these decisions in accordance with:

- Environment Agency guidance 'Treating metal waste in shredders: appropriate measures'
- Environment Agency guidance 'Waste electrical and electronic equipment (WEEE): appropriate measures'

• Environment Agency guidance 'Waste temperature exchange equipment: appropriate measures'

We made these decisions in accordance with Best Available Techniques for Waste Treatment.

## **Growth Duty**

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 100 of that Act in deciding whether to grant the variation of this permit.

Paragraph 1.3 of the guidance says:

"The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation."

We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise noncompliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.